

REMARKS

The foregoing amendment amends claims 1-12, cancels claims 13-14, and adds claims 15-16. Now pending in the application are claims 1-12 and 15-16, of which claim 1 is independent.

Claim Amendments

Applicants amend claim 1-12 to clarify the scope of the claimed invention. In particular, claim 1 is amended to recite subject matter recited in claim 2. Claim 1 is also amended to recite a piston and first second chambers disposed adjacent to the piston. Support for the claim amendment can be found in the original claims, specification and figures, for example Figs. 13-18, of the pending application. No new matter is added.

Claim Rejection under 35 U.S.C. §112

Claims 2, 4 and 6-12 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Applicants respectfully traverse the rejection for the following reasons.

The Examiner notes in the Office Action that in claim 5, it is unclear how a fluctuating pressure is released to the outside of the power tool under unloaded driving conditions. In response, Applicants submit that the fluctuating pressure can be generated by driving the crank mechanism, and hence can be developed in a load or unloaded driving condition as long as the piston reciprocates. In the loaded driving condition, the fluctuating pressure is introduced into the dynamic vibration reducer to drive the weight. In the unloaded driving condition, an embodiment of the present invention prevents the fluctuating pressure from being introduced into the dynamic vibration reducer. In another embodiment, the pressure in the chamber is prevented from fluctuating by communicating the chamber to the outside of the power tool. This feature is described in the specification of the pending application at page at 2, line 9 through page 9, line 13.

With respect to other issues raised by the Examiner in the Office Action, Applicants amend the claims in the foregoing amendment to address the issues. In light of the foregoing claim amendments and arguments, Applicants request that the Examiner reconsider and

withdraw the rejection of claims 2, 4 and 6-21 under 35 U.S.C. §112, second paragraph, and pass the claims to allowance.

Claim Rejection under 35 U.S.C. §102

Claims 1, 3 and 13 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 2,875,731 (“Settles”). Applicants respectfully traverse the rejection for the following reasons.

In the forgoing amendment, claim 1 is amended to incorporate the subject matter recited in claim 2. Claim 13 is canceled. Claim 3 depends from claim 1 and adds limitations to claim 1. In light of this, Applicants submit that the rejection of claims 1, 3 and 13 is moot. Applicants therefore request that the Examiner reconsider and withdraw the rejection of claims 1, 3 and 13 under 35 U.S.C. §102(b), and pass the claims to allowance.

Claims Rejection under 35 U.S.C. §102

Claims 1, 3 and 13 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,478,293 (“Weilenmann”). Applicants respectfully traverse the rejection for the following reasons.

In the forgoing amendment, claim 1 is amended to incorporate the subject matter recited claim 2. Claim 13 is canceled. Claim 3 depends from claim 1 and adds limitations to claim 1. In light of this, Applicants submit that the rejection of claims 1, 3 and 13 is moot. Applicants therefore request that the Examiner reconsider and withdraw the rejection of claims 1, 3 and 13 under 35 U.S.C. §102(b), and pass the claims to allowance.

Claim Rejection under 35 U.S.C. §103

Claims 2, 6-10 and 14 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,478,293 (“Weilenmann”) in view of U.S. Patent No. 4,567,951 (“Fehrle”). Applicants respectfully traverse the rejection for the following reasons.

Independent claim 1 is directed to a power tool having a tool bit, a tool body and an actuating mechanism disposed in the tool body to drive the tool bit linearly by means of pressure fluctuations. The actuating mechanism has a driving motor, a motion converting mechanism, a piston and a striker disposed in front of the piston to cause the tool bit a linear motion. A first chamber is disposed between the striker and the piston, and a second chamber is disposed adjacent to the piston within the tool body in an opposite side of the first chamber. The tool also includes a dynamic vibration reducer having a weight that reciprocates to reduce vibration of the actuating mechanism. *The weight is driven by means of pressure fluctuations caused in the second chamber when the piston reciprocates.* Claim 14 is canceled. Claims 2 and 6-10 depend from claim 1 and add separate and patentable limitations to claim 1.

Applicant submit that Weilenmann and Fehrle do not teach that *the weight is driven by means of pressure fluctuations caused in the second chamber when the piston reciprocates*, as recited in claim 1.

Weilenmann teaches a hammer drill including a striking mechanism and a handle spring. Weilenmann also teaches that piston-like weighted members are slidably mounted in the housing to absorb vibration generated during operation of the drill. Weilenmann, however, does not teach that the weight is driven by means of pressure fluctuations caused in the second chamber when the piston reciprocates, as recited in claim 1. As the Examiner recognizes in the Office Action, Weilenmann does not teach the actuating mechanism of the claimed invention including the piston, the first chamber and the second chamber.

Fehrle is cited by the Examiner to provide teaching for the detailed structure of the actuating mechanism. Fehrle teaches a hammer drill in which a motor driven striking mechanism is provided with two air cushions of changeable volumes. Fehrle also teaches that when the striker moves toward the tool, both air cushions act on the striker whereas when the striker moves away from the tool, only one of two air cushions acts on the striker. Fehrle, however, does not teach that the weight is driven by means of pressure fluctuations caused in the second chamber when the piston reciprocates, as recited in claim 1. Fehrle teaches the use of air cushions, not a weight, to reduce vibration of a power tool.

In light of the foregoing claim amendments and arguments, Applicants respectfully submit that Weilenmann and Fehrle fail to teach all of the limitations of claim 1. Claims 2 and 6-10, which depend from claim 1, are not rendered obvious over the cited prior art references. Applicants therefore request that the Examiner reconsider and withdraw the rejection of claims 2, 6-10 and 14, and pass the claims to allowance.

New Claims


Applicants add new claims 15 and 16 to depend from claim 1. Claim 15 recites the dynamic vibration reducer in more detail, and claim 16 recites that the pressure fluctuations in the second chamber is anti-phased with respect to pressure fluctuations in the first chamber when the piston reciprocates. Support for the new claims can be found in the original claims, descriptions and figures of the pending application. No new matter is added. In light of the reasons set forth above, Applicant submit that new claims 15 and 16 recites patentable subject matter and are in condition for allowance.

Conclusion

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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Respectfully submitted,

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